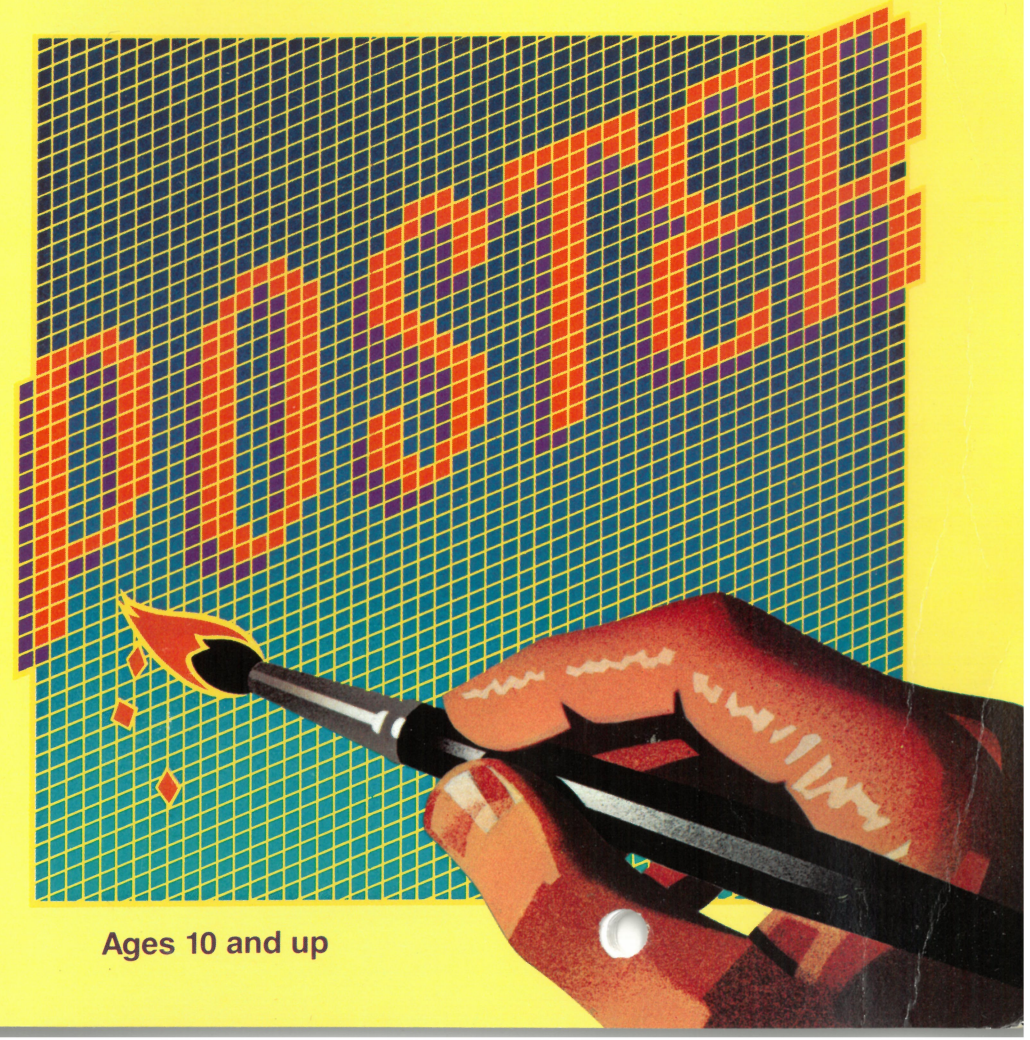
Scholastic Wizzware™ / Apple® IIe or II Plus, 48K, disk

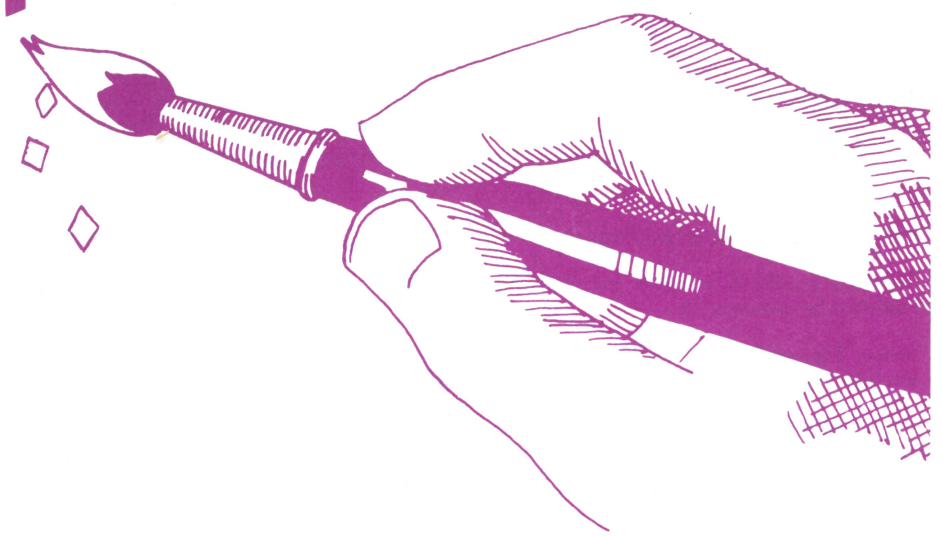
A simple computer graphics language for creating screen pictures.



Ages 10 and up

Scholastic

POSTER™



Poster is adapted from *Microzine*™.
Designed and developed by Information Technology Design Associates, Inc.
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INTRODUCTION

Everybody is an artist in one way or another: Some people dance, some sing, and some paint. With *Poster,* you can be the newest kind of artist — a computer artist!

Poster is a simple, but powerful, programming language that helps you "paint" on the screen. You can choose from a variety of background colors, brush colors, and brushstrokes. You can create colorful patterns and shapes, paint pictures, and even tell stories with your posters.

And when you create posters that you'd like to keep, you can store them on a data disk. Once a poster is saved on a data disk, you can look at it, do touch-up work, or show it to your friends any time you like.

Read this handbook for clear instructions on how to use *Poster.* Then try everything. Experiment. You can't break the program, so have fun. If you have any problems, come on back. You'll probably find any answers you need in this handbook.

So get that old imagination fired up! Let your fingers dance over the keyboard, and see what magic you and *Poster* can bring to your TV screen or monitor.

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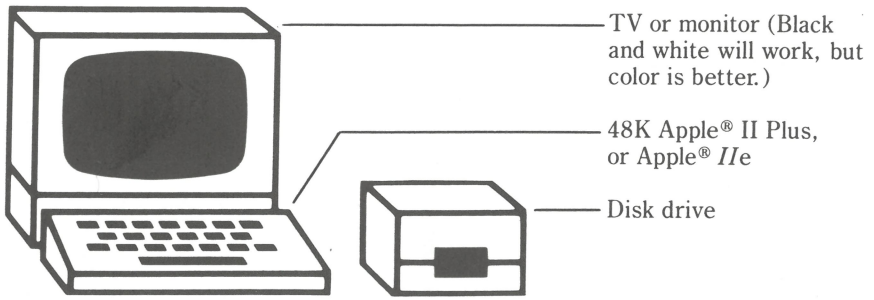
GETTING STARTED

Equipment You Need



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Loading Instructions

1. Open disk drive door.

2. Hold the disk with the label facing you.

3. Insert the disk slowly with the label facing up.

4. Close the disk drive door.

5. Turn on the computer and monitor (or TV).

NOTE: Never remove or insert a disk while the disk drive's red light is on.

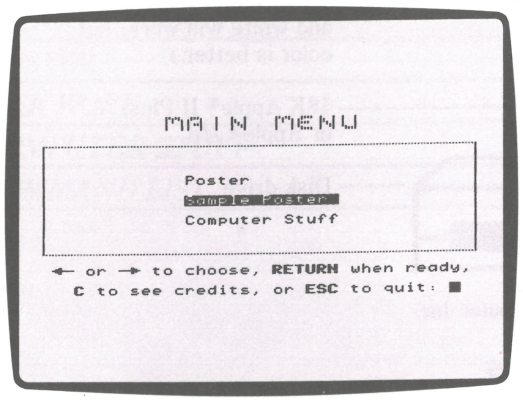
6. *Poster* will appear on the screen.

If *Poster* does not appear on the screen:
- Turn the computer off. Turn it back on and try again.
- Make sure the disk drive door is closed.
- Have someone who knows how to hook up the drive check to see if it's hooked up correctly.

7. Press **RETURN** until the Main menu appears.

MAIN MENU

The *Poster* disk is divided into three parts: *Poster;* Sample Poster; and Computer Stuff. They are listed on the Main menu.



To create designs, choose *Poster.* Follow the instructions in the *Poster* section of this handbook to learn how to use *Poster.*

But first, choose Sample Poster to see some of the things that can be done with *Poster.* Press **RETURN** whenever the computer tells you to, and the Sample Poster will tell a small story.

Soon enough, you'll find yourself creating great posters. You can save these posters on a data disk. Then you can run them as often as you want. The data disk must be initialized by the Computer Stuff program. It's a good idea to initialize a disk before you start making posters. (To do this, see Computer Stuff on page 31.)

USING POSTER

RETURN to Continue

After you give the computer a command, or answer a question, press **RETURN** to continue. This is like telling the computer that you are ready for it to "go ahead."

Menus

When you are given a menu, or list of choices, use the arrow keys to highlight the choice you want. Then press **RETURN.**

(Y/N)

When you see (Y/N) at the end of a question, it means the computer is waiting for you to answer "yes" or "no." Type Y for yes or N for no. Then press **RETURN.**

Entering Information

Whenever the program asks for information, just type it in and press **RETURN.**

If you make a mistake while typing, use the ← (back arrow) key to move back, then retype correctly.

ESC to Quit

Press **ESC** to quit what you are doing. You will be sent to the last menu you chose from. If you **ESC** from the Main menu, you will leave the program.

Apple IIe

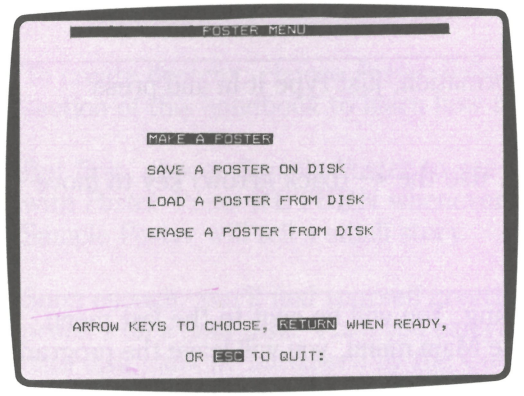
To use *Poster* on the Apple *II*e, press the **CAPS LOCK** key so that it is locked down.

POSTER

When you choose *Poster,* the computer will ask if you want to see a list of *Poster* commands. To tell the computer what you want it to do, you must give it commands. This list gives the code for each command in the *Poster* language. Following the list of commands you will see two screens of *Poster* tips. You must use the code, not the full command, for the *Poster* program to understand you. The commands are also listed at the end of this book.

Poster Menu

The *Poster* menu gives you four options: Make a Poster; Save a Poster on Disk; Load a Poster from Disk; and Erase a Poster from Disk.


POSTER MENU
MAKE A POSTER
SAVE A POSTER ON DISK
LOAD A POSTER FROM DISK
ERASE A POSTER FROM DISK
ARROW KEYS TO CHOOSE, RETURN WHEN READY,
OR ESC TO QUIT:

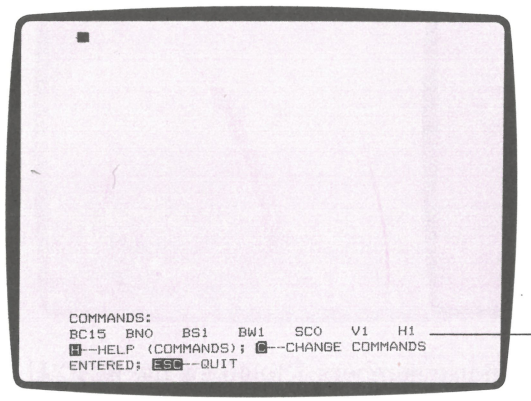
Make a Poster

This option allows you to paint and edit your poster. The flashing square at the top left corner of screen is your paintbrush. It is in its starting position.

The flashing square after the word "COMMANDS" is where you type your *Poster* commands. If you make a typing mistake and press **RETURN**, the computer will tell you that it doesn't understand. When the message clears, retype the command.

Control Line

The line of the letters and numbers at the bottom of the screen is the Control Line. The Control Line will help you keep track of information about your poster.



Control Line

Painting (Right, Left, Up, or Down)

You can paint right, left, up, or down (R, L, U, or D). For example, type:

R20

Press **RETURN**. The paintbrush paints a line to the right. The R in R20 directs the brush right. The 20 tells it how far to go — 20 spaces.
Now type:

D10

Press **RETURN**. D10 means paint down (D) 10 spaces.

Type:

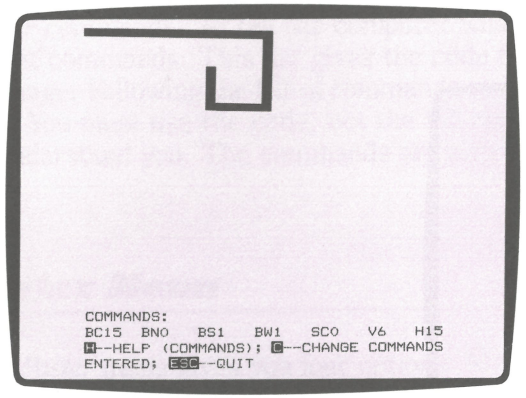
L6

Press **RETURN.** L6 means paint a line left (L) 6 spaces.

Type:

U5

Remember to press **RETURN** after you type in commands. You've probably caught on by now. U5 means paint up (U) 5 spaces.



Now experiment for a while. You can use numbers 1 to 40 for the R, L, U, or D commands. If you use a command that causes the brush to strike a screen border, the brush will stop painting there.

Keep an eye on the Control Line as you work on the next section. It will help you keep track of the screen color, brush color, brush width, brush noise, and brush speed.

Screen Color (SC)

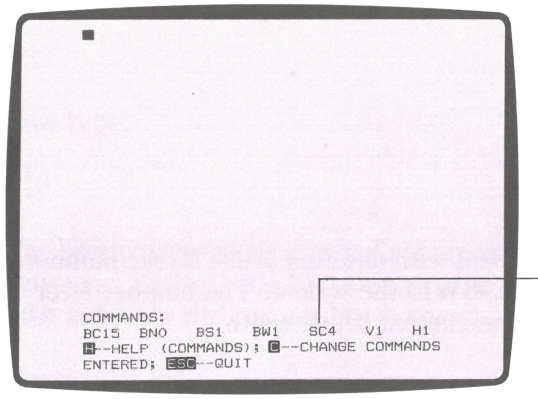
The *screen color* (SC) is now black. You can change it to any of 15 other colors. To see these screen colors, type:

COL

The colors appear on the screen. Below each color is the number that corresponds to it. Suppose you want a green screen. The number for green is 4. (Adjust the color on your TV or monitor if you need to.) Press **RETURN** to go back to the Paint screen. Then type:

SC4

The screen color turns green. Look at the Control Line and you'll see that the number after SC is 4.



Screen Color 4

NOTE: It's a good idea to choose a screen color first, then start drawing. When you change the screen color, the poster you've painted up to that point gets covered.

Brush Color (BC)

The BC command changes the color of the paintbrush. Use the same color chart for your brush and screen colors.

The brush color always starts out white. The number for white is 15. If you look at the Control Line, you'll see that BC is followed by the number 15. You can change it to blue by typing:

BC6

To see the new brush color, type:

D10

Now the brush color is blue.

Experiment with different brush and screen colors. You'll find some combinations work better than others. And if you use the same brush color and screen color, you won't see any results at all.

Brush Width (BW)

You've been painting with a very narrow brush stroke. You can change to broader strokes with the *brush width* (BW) command. Type:

BW7

To see the new brush width, type:

R20

It's a broader brush stroke! Experiment with different brush stroke numbers from 1 to 10. BW1 is the narrowest, BW10 the widest. The number after BW on the Control Line indicates the current brush width.

Brush Noise (BN)

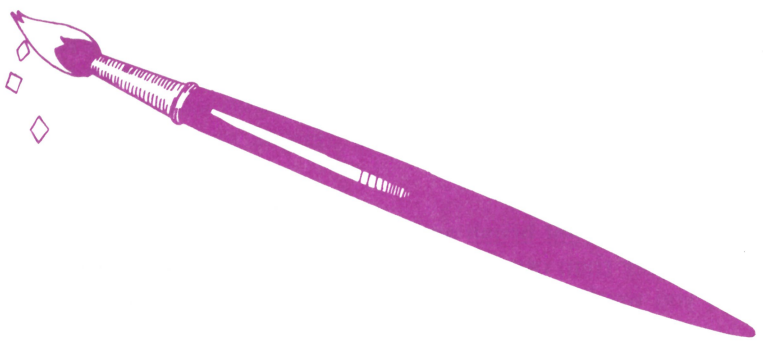
Your brush has been silent so far. Add sound with the *brush noise* (BN) command. Type:

BN5

Then type:

U10

Now you can hear the brush as well as see it. Experiment with brush noise numbers between 1 and 10 to hear what they sound like. The number after BW on the Control Line indicates the current brush noise.



Brush Speed (BS)

You've been drawing at brush speed (BS) 1. That's the fastest brush speed. To slow it down with the BS command, type:

BS3

Now type:

L10

The brush moves more slowly. Experiment with different brush speed numbers between 1 (fastest) and 10 (slowest). The number following BS on the Control Line indicates the current brush speed.

Run

The RUN command tells the computer to carry out any commands you've given it so far. It runs the poster step by step, just as you created it. Type RUN and press **RETURN** to see what you've done so far.

Stopping a Poster

After you type RUN, you can stop the brush from painting by pressing the **ESC** key on the top left of the keyboard. The brush will finish the command it is working on. Then it will stop.

New

If you want to begin a new poster, type NEW. This will erase your poster and its commands. If you want to save your old poster, do not type NEW until you've gone back to the *Poster* menu and saved your poster on a data disk. (See page 29.) After you clear the screen with the NEW command, the brush will go back to its starting position.

Lifting the Paintbrush

You can move your paintbrush from one position to another on the screen without painting. To do this, use the horizontal (H) and vertical (V) commands.

Clear the screen by typing NEW.

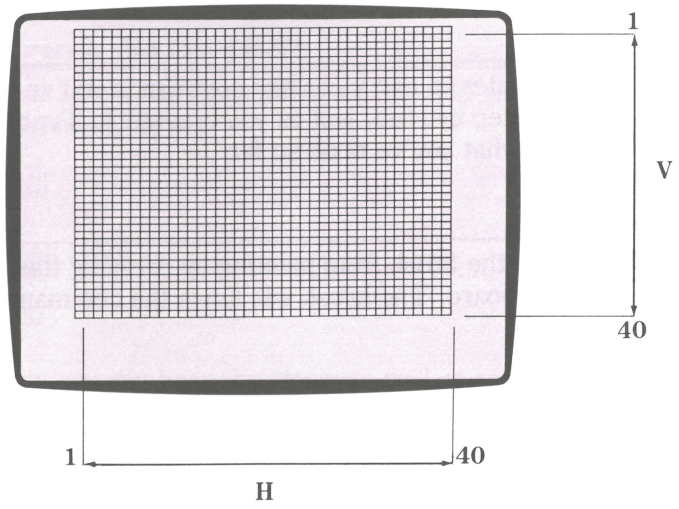
Moving Horizontally (H)

Look at the letter H on the Control Line. Next to it is the number 1. This tells you the horizontal — left to right — location of your paintbrush. Now type:

H20

The paintbrush moves to position 20 on the same row, without painting. The number following H on the Control Line is now 20.

As you can see on the grid, each row on the screen is divided into 40 locations. Experiment with different H values between 1 and 40.

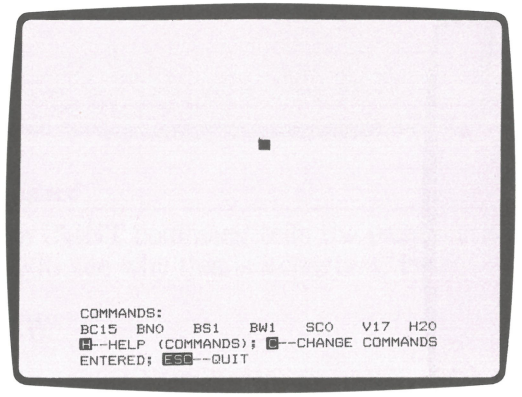


Moving Vertically (V)

Look at the letter V on the Control Line. Next to it is the number 1. This tells you the vertical — top to bottom — location of the paintbrush. Type:

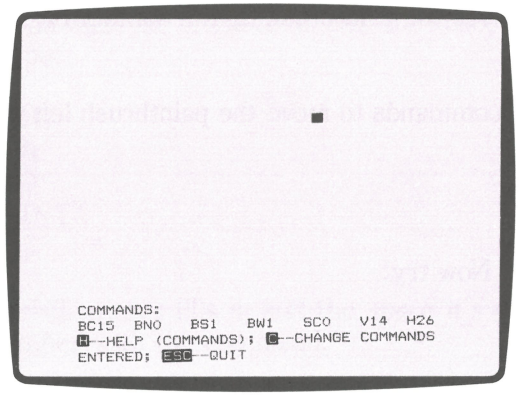
V17

The paintbrush moves to position 17 in the same column. On the grid, you'll see that every column is divided into 40 locations. You can use any number between 1 and 40 with the V command.



Use the H and V commands to move the brush wherever you want it on the screen. To move it to H26, V14, for example, just type:

H26
V14

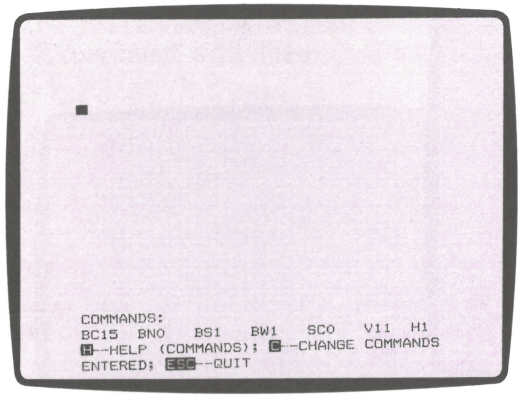


V+, V−, H+, H− Commands

Here's another way to move your paintbrush without painting. First type NEW. The paintbrush moves back to V1, H1, or home. Now type:

V + 10

The paintbrush moves down the screen. The Control Line tells you the paintbrush is now located at V11. The command V + 10 changes the brush's V position by adding 10 to it.



Use the minus (−) sign with the V command to move the brush up the screen. Type:

V − 5

As you can see, the V command moves the paintbrush up the number of spaces you want.

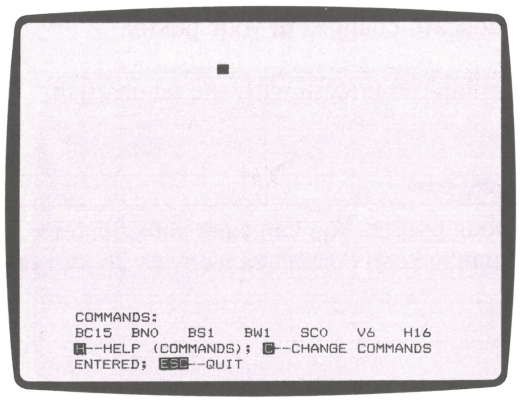
You can also use the H + and H − commands to move the paintbrush left and right. For example, type:

H + 25

The paintbrush moves to the right. Now try:

H − 10

This moves the paintbrush to the left.



Paint

The PAINT command tells the paintbrush to fill in only the space that it's on. To see why this is important, type:

NEW
V10
H10
U1
V20

The brush paints 2 spaces instead of 1. That's because the brush always fills in the space it's on before painting the number of spaces you command.

If you want the brush to fill only the space it's on, use the PAINT command. Type:

NEW
V10
H10
PAINT
V15

PAINT always fills in just the space it's on, so you don't have to use a number with the command.

Erase

If you want to erase just the space the brush is on, type ERASE. You can use the ERASE command to make delicate changes in your poster.

You can also use ERASE to create animated effects with the paintbrush. For some examples, see page 20.

Printing Words on the Screen

The PR command prints words on your poster. You can turn your posters into colorful storybooks. Each PR command can contain as many as 26 letters or spaces. Type:

```
NEW
PR ONCE UPON A TIME
```

Press **RETURN.** The words appear beneath your poster. Press **RETURN** again, and the words disappear. Now type:

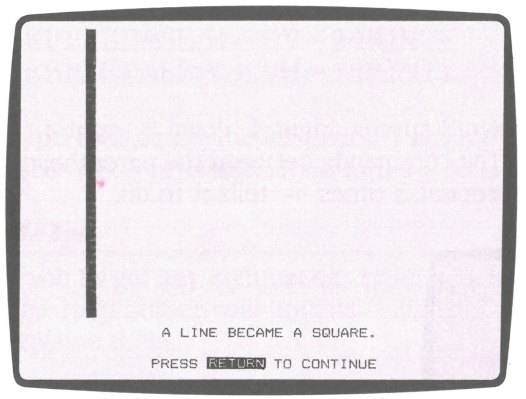
```
D40
PR A LINE BECAME A SQUARE.
```

(You will have to press **RETURN** again here.)

```
SC1
R10
U10
L10
D10
```

Run the poster and look at it. After ONCE UPON A TIME appears, the brush pauses. Read the words, look at the poster, then press **RETURN**. The brush will continue painting.

Now more words appear on the screen, and again the paintbrush pauses. Read the words, look at the poster — then press **RETURN**. The brush will continue painting.



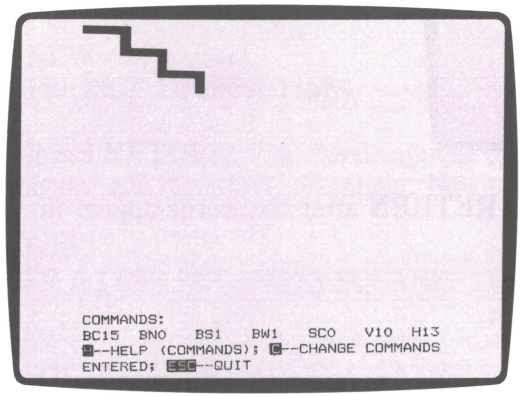
Remember that you need to press **RETURN** after the words appear in your interactive poster.

Repeat Command (REP)

The *repeat* (REP) command tells the paintbrush to repeat a group of commands a certain number of times. For example, type:

NEW
REP3(R4/D3)

The brush paints right 4 spaces, down 3 spaces, right 4, down 3, right 4, down 3. The paintbrush carries out the commands between the parentheses three times. That's what REP3 — repeat 3 times — tells it to do.



Here are some more examples of the REP command. Notice that slash marks must be used to separate each command. Type:

REP5(BC1/D5/BC12/R5)

The paintbrush repeats the commands between the parentheses five times.

Here's an example using the H+ command. Type:

NEW
REP5(R4/D2/H+3)

Here's another one to try. Type:

NEW
REP4(BC6/BW3/D5/BW1/BC3/R5)

Type in the following poster to see how the REP command works with the ERASE and PAINT commands:

REP10(ERASE/H+2/V+2/PAINT)
REP10(ERASE/H+1/V−2/PAINT)
REP10(ERASE/V+2/H−1/PAINT)

Type RUN to get the full effect. The poster listed in the back of this handbook uses this type of animation to tell a colorful story.

Help

If you forget any commands, type **H**, for help, and then press **RETURN**. The Help screen will appear. This shows all *Poster* commands and briefly explains them.

Two more Help screens offer useful tips. Press **RETURN** for each of these screens. Then press **RETURN** to get back to the Paint screen.

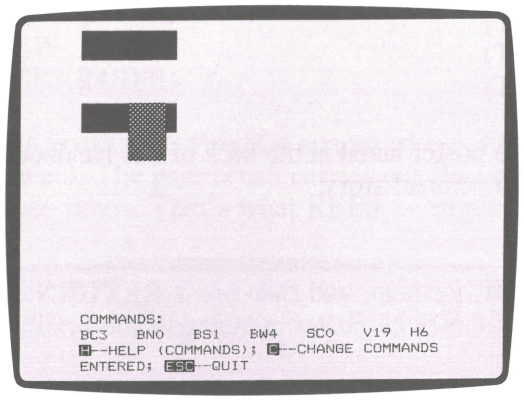
Poster Touch-Up

The computer keeps track of all the *Poster* commands you give it until you type NEW or turn off your computer. This gives you the chance to change your poster by changing, adding, or erasing commands.

To see how this works, type:

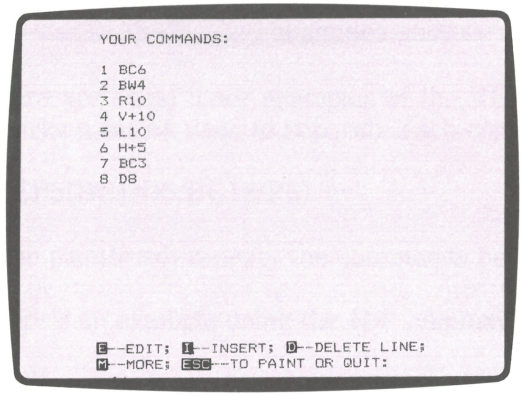
NEW
BC6
BW4
R10
V+10
L10
H+5
BC3
D8

Now run this poster. After you make the following changes, run it again to see what you've done. Type **C** to get to the Change Commands screen.



Change Commands (C)

To change commands you've entered, go to the Paint screen, type **C**, and press **RETURN**. The list of your commands will appear on the screen, numbered in the order that you entered them.



Editing a Line

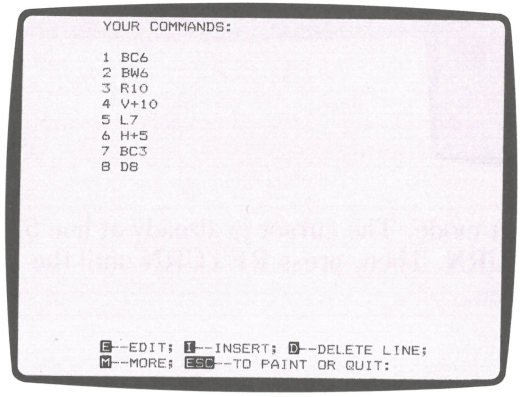
Change the brush width in line 2 from BW4 to BW6. To do this, you have to edit line 2. Type **E**, for edit, and press **RETURN**.

The cursor moves to line 1 of your command list. Move it to line 2 by pressing **RETURN**. (If you pass line 2, keep pressing **RETURN** until the cursor reaches the bottom of the screen. Then start over by typing **E**.)

The cursor should be on the B in line 2. Use the → key to move the cursor to the 4.

Now change the 4 to a 6. To do this, simply type a 6 over the 4. Then press **RETURN**. That's all there is to it — you've just edited a line.

Try editing another line. This time, change line 5 from L10 to L7. Press **RETURN** to move to line 5. Use → to move to the 1 in L10. Type a 7 over the 1. Then press **RETURN**. You've edited another line. You can edit as many lines as you like while you are in the edit mode.



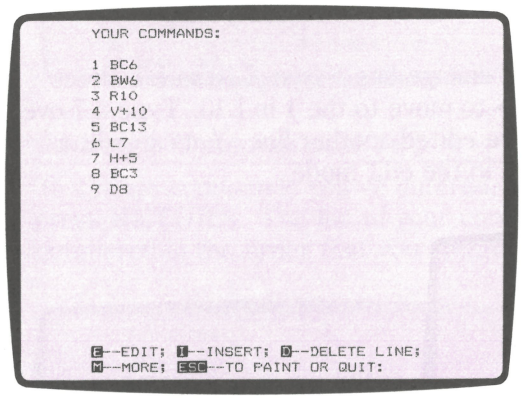
Press **RETURN** to move the cursor to the bottom of the screen. From here, you can press **E** to edit, **I** to insert, **D** to delete or **M** to see more lines.

Inserting a Line

You can insert a new command between two commands that already exist. Here's an example.

Suppose you want to change the brush color to yellow before line 5. That means you have to insert the command BC13.

Type **I** and press **RETURN**. The computer asks where you want to insert a line. You want to insert it right before line 5 — so type 5 and press **RETURN**. The computer renumbers line 5 and all following lines. The new line 5 is left blank.

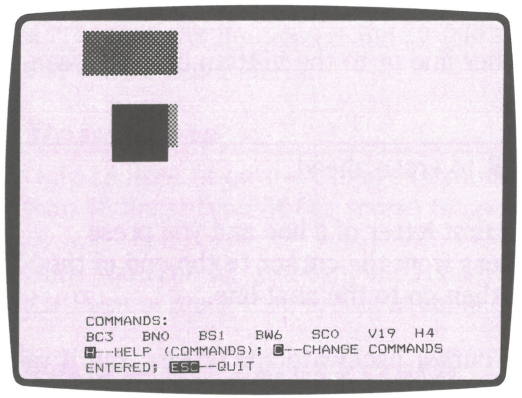


The computer places you in the edit mode. The cursor is already at line 5, so just type BC13 and press **RETURN**. Then, press **RETURN** until the cursor is at the bottom of the screen.

Deleting a Line

You can delete, or erase, lines as easily as you can insert them. Erase line 7, H + 5. Type **D,** for delete, and press **RETURN**. The computer asks which line you want to delete. Type 7 and press **RETURN**. Line 7 is erased, and the computer renumbers the lines that follow.

When you're ready, return to the Paint screen by pressing **ESC**. Now run your new poster to see how it looks.



Touch-up Summaries

Editing a Line

- Type **C** and press **RETURN** to list your program.
- Type **E** and press **RETURN** to enter the edit mode.
- Press **RETURN** to move the cursor to the line you want to edit.
- Use the arrow keys to move the cursor to the letter or number you want to edit.
- Type your corrections.
- Move the cursor to the end of the line.
- Press **RETURN** to move to another line or to the bottom of the screen.

Erasing in Edit

SPACE BAR: Use the **SPACE BAR** to erase ahead.

RETURN: If the cursor is past the first letter of a line and you press **RETURN**, all the letters and numbers from the cursor to the end of the line will be erased. The cursor will then go to the next line.

Arrow Keys: The ← key moves the cursor backward and erases. But if you then press the → key before doing anything else, you'll get your letters back.

Inserting a Line

- Type **I** and press **RETURN**.
- The computer will ask, INSERT BEFORE WHAT LINE NUMBER? Type in the number and press **RETURN.**
- Type in your new command where the computer has left a line blank.
- Press **RETURN** after you insert a line.

You can then edit any of the following commands (see Editing a Line on page 23). Use **RETURN** to move the cursor to the bottom of the screen.

Moving from Line to Line

When you are editing or inserting lines, you can press **RETURN** to move to another line and edit it. To get to the bottom of the screen, keep pressing **RETURN**.

Deleting a Line

- Type **D** and press **RETURN**.
- When the computer asks which line number you'd like to delete, type in the line number and press **RETURN**.
- The line will be deleted and all the lines below it will move up a space and will be renumbered.

More Lines

Only 18 lines fit on the Change Commands screen. If your poster is longer than 18 lines, type **M** (for more) to see the next 18 lines.

Once you type **M**, you can only return to lower line numbers by going to the Paint screen, then typing **C** again.

Back to the Paint Screen

When the cursor is at the bottom of the screen, press **ESC** to return to the Paint screen. Type RUN, and you will see a new poster that shows all the changes you made.

Empty Command

If you leave a line blank while you work on the Change Commands screen, the computer will say EMPTY COMMAND when you run the poster. Every line must contain a command.

Poster Length

The computer will not accept any more than 270 lines for each poster.

Hints!! Hints!! Hints!!

Here are some hints for getting more out of *Poster.*

- Use graph paper to help you plan your poster. Plot your poster in a grid 40 by 40 spaces in size. Then write down the commands you want to use. When you're ready, enter them into the computer.

- Try these REP commands:

REP1(H20/V20); REP1 (R30/D20/L15/U5).

REP1 means do these commands just once. This trick lets you put several commands on one line and stretch the 270-line limit.

- Type in this sample poster, run it, and you'll see how you can use *Poster* to do animation.

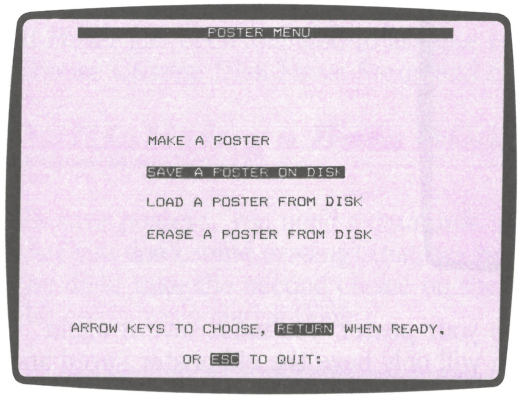
```
NEW
PR ONE DAY IN THE FOREST . . .
REP1(SC14/BC2/BW8/R40/BN1)
REP1(BC9/H15/V30/BW1/U12)
REP1(BC12/PAINT/V+2/H-1)
REP3(PAINT/V+3)
REP1(H-1/V-2)
REP3(PAINT/V-3)
REP1(H+3/V+1)
REP3(PAINT/V+3)
REP1(H+1/V-2)
REP3(PAINT/V-3)
REP1(V+13/BC13/H-1/BN5/PAINT)
PR CATERPILLAR LEFT HER TREE
H+1
REP12(PAINT/H-1/ERASE/H+2)
PR TO FIND A FRIEND.
REP12(PAINT/H-1/ERASE/H+2)
```


DISK WORK

Save a Poster on Disk

When you turn off the computer or type NEW, you lose the poster you are working on unless you first save it on a data disk. You can then look at it, improve it, or show it to your family and friends any time you like.

When you have a poster you want to save, go to the Paint screen and press **ESC**. Then press **RETURN** to get to the *Poster* menu. Put an initialized data disk in the drive. Choose Save a Poster on Disk from the *Poster* menu. Before you press **RETURN**, make sure you have selected the right option, or else you'll lose your poster.

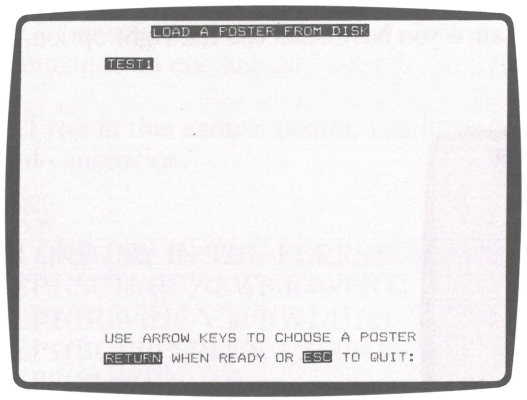

POSTER MENU
MAKE A POSTER
SAVE A POSTER ON DISK
LOAD A POSTER FROM DISK
ERASE A POSTER FROM DISK
ARROW KEYS TO CHOOSE, RETURN WHEN READY,
OR ESC TO QUIT:

After you press **RETURN**, the computer asks you to name your poster. Type in a name up to ten letters or numbers long and press **RETURN**. The disk drive will whir and the red light will go on. After a few moments the light will go off. Your poster has been saved.

Load a Poster from Disk

Once you've saved a poster, you can look at it anytime. Keep in mind that when you load a poster from a data disk, it erases any other poster that you are then working on.

To load a poster, choose Load a Poster from Disk on the *Poster* menu. Put the data disk with your poster on it in the drive. Then press **RETURN**. Highlight the poster you want to look at and press **RETURN** again. Once the poster is loaded, type RUN to run it, or **C** to change it.



If you make changes or additions to your poster, you must save it again under a new name. If you don't, you will only have the old poster saved and your changes will be lost. Once you have saved the new poster, you can erase the old one.

Erase a Poster from Disk

You can erase a poster from a data disk by putting your data disk in the drive and selecting Erase a Poster from Disk on the *Poster* menu. Think carefully before you choose this option. Once you erase a poster from the data disk, it's gone forever.

COMPUTER STUFF

Changing Number of Disk Drives

Each time you load *Poster,* it assumes you have one disk drive. If you have two, choose Change Disk Drive Setup. Then follow the instructions given.

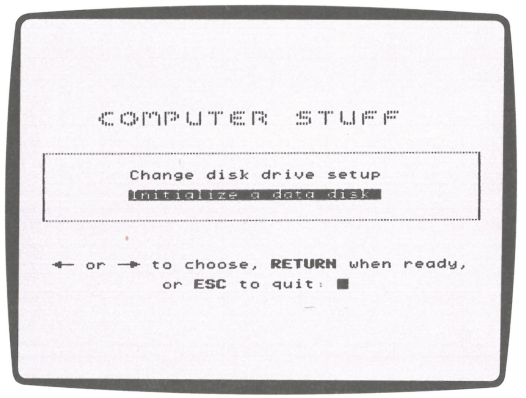
If you do not know the slot number your drive is connected to, ask somebody who does know, or just press **RETURN**. The computer will then assume the answer is slot 6.

The advantage of having two drives is that when you need to use a data disk, you will be able to put it in the second drive. You will not have to take the *Poster* disk out of its drive.

If *Poster* has been changed to assume two drives and you only have one, choose Change Disk Drive Setup and change back to one drive.

Initializing a Data Disk

To save posters, you need a data disk. A data disk is a blank disk (or one that you don't mind erasing) that has been initialized by *Poster.* To initialize the disk, take the second choice on the Computer Stuff menu and follow the computer's instructions.



COMMAND LIST

The following commands make up the *Poster* language. Type in the code for a command, press **RETURN**, and the command will be carried out.

CODE	COMMAND	RANGE	SAMPLE
SC	Screen Color	0-15	SC10
BC	Brush Color	0-15	BC9
BS	Brush Speed	1-10	BS2
BW	Brush Width	1-10	BW5
BN	Brush Noise	0-10	BN3
U	Paints Up	1-40 Spaces	U23
D	Paints Down	1-40 Spaces	D18
R	Paints Right	1-40 Spaces	R5
L	Paints Left	1-40 Spaces	L38
PAINT	Paints One Space		PAINT
ERASE	Erases One Space		ERASE
PR	Prints Letters		PR JIM
H	Place Brush Here		H26
V	Place Brush Here		V39
REP	Repeat		REP3(U3/L7/D2)
RUN	Run Poster		RUN
NEW	Erase Poster and Commands		NEW
COL	Show Color Chart		COL

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